

University of Groningen

Introduction

Matthijs, Christa; Kok, Jan; Paping, Richard

Published in:
Historical Life Course Studies

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2018

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Matthijs, C., Kok, J., & Paping, R. (2018). Introduction: Urban-Rural Differences in Historical Demography. *Historical Life Course Studies*, 6(1), 1-10.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Introduction: Urban-Rural Differences in Historical Demography

Christa Matthys, Jan Kok & Richard Paping

To cite this article: Matthys, C., Kok, J., & Paping, R. (2018). Introduction: Urban-Rural Differences in Historical Demography. *Historical Life Course Studies*, 6, 1-10. <http://hdl.handle.net/10622/23526343-2018-0009?locatt=view:master>

HISTORICAL LIFE COURSE STUDIES

Urban-rural dichotomies in
historical demography

VOLUME 6, SPECIAL ISSUE 1
2018

GUEST EDITORS

Christa Matthys
Saskia Hin
Jan Kok
Richard Paping



MISSION STATEMENT

HISTORICAL LIFE COURSE STUDIES

Historical Life Course Studies is the electronic journal of the *European Historical Population Samples Network* (EHPS-Net). The journal is the primary publishing outlet for research involved in the conversion of existing European and non-European large historical demographic databases into a common format, the Intermediate Data Structure, and for studies based on these databases. The journal publishes both methodological and substantive research articles.

Methodological Articles

This section includes methodological articles that describe all forms of data handling involving large historical databases, including extensive descriptions of new or existing databases, syntax, algorithms and extraction programs. Authors are encouraged to share their syntaxes, applications and other forms of software presented in their article, if pertinent, on the EHPS-Net website.

Research articles

This section includes substantive articles reporting the results of comparative longitudinal studies that are demographic and historical in nature, and that are based on micro-data from large historical databases.

Historical Life Course Studies is a no-fee double-blind, peer-reviewed open-access journal supported by the European Science Foundation (ESF, <http://www.esf.org>), the Scientific Research Network of Historical Demography (FWO Flanders, <http://www.historicaldemography.be>) and the International Institute of Social History Amsterdam (IISH, <http://socialhistory.org/>). Manuscripts are reviewed by the editors, members of the editorial and scientific boards, and by external reviewers. All journal content is freely available on the internet at <http://www.ehps-net.eu/journal>.

Co-Editors-In-Chief:

Paul Puschmann (Radboud University & KU Leuven) & Luciana Quaranta (Lund University)
hislives@kuleuven.be

The European Science Foundation (ESF) provides a platform for its Member Organisations to advance science and explore new directions for research at the European level. Established in 1974 as an independent non-governmental organisation, the ESF currently serves 78 Member Organisations across 30 countries. EHPS-Net is an ESF Research Networking Programme.



The European Historical Population Samples Network (EHPS-net) brings together scholars to create a common format for databases containing non-aggregated information on persons, families and households. The aim is to form an integrated and joint interface between many European and non-European databases to stimulate comparative research on the micro-level.
Visit: <http://www.ehps-net.eu>.



HISTORICAL LIFE COURSE STUDIES

VOLUME 6, SPECIAL ISSUE 1 (2018), 1-10, published 23-04-2018

Introduction: Urban-Rural Differences in Historical Demography

Christa Matthys
Ghent University

Jan Kok
Radboud University Nijmegen

Richard Paping
University of Groningen

ABSTRACT

Systematic research on urban-rural variation in demographic behavior is necessary to overcome dichotomous views resulting from studying cities and the countryside separately. After all, a web of interactions facilitating the diffusion of ideas and behavior connects cities and rural areas. That is why it is especially important to study the comportment of migrants moving between urban and rural environments. In line with this argument five case studies are presented in this special issue that use static or dynamic individual-level data to analyze urban-rural demographic differences and life courses of migrants in Europe (Germany, the Netherlands and Scotland), mainly during the nineteenth century. The outcomes show that the places of residence indeed influenced demographic behavior to a considerable extent, although they do not reflect a simple and strict division between cities and rural areas. Rather, demographic behavior was affected by a diversity of local conditions, including various town sizes, calling for a further exploration of the impact of local demographic, working and living conditions. The studies in this issue also warn against simplified views regarding migrants in the past, for instance, their depiction of being of relatively humble social background. For many migrants, their migration was not a definitive break with the place of origin, and they did not assimilate completely to the dominant behavior in their destination. Instead, migrants often remained embedded in and influenced by trans-regional social networks.

Keywords: Urban-rural differences, Historical demography, Life courses, Migration, Comparative research

e-ISSN: 2352-6343

PID article: <http://hdl.handle.net/10622/23526343-2018-0009?locatt=view:master>

The article can be downloaded from [here](#).

© 2018, Christa Matthys, Jan Kok, Richard Paping

This open-access work is licensed under a [Creative Commons Attribution 4.0 International License](http://creativecommons.org/licenses/by/4.0/), which permits use, reproduction & distribution in any medium for non-commercial purposes, provided the original author(s) and source are given credit. See <http://creativecommons.org/licenses/by/4.0/>

1 INTRODUCTION

This special issue presents several exercises in urban-rural comparisons of demographic behavior in the past. The articles in the issue deal with urban-rural differentials in fertility, nuptiality, mortality and extend the scope of demographic analysis to include male stature and social mobility. They focus mainly on the nineteenth century, and include studies on Germany, Scotland and the Netherlands. Differences in behavior between cities and villages have often been taken for granted, but systematic research is quite rare. Do differences in e.g. the aggregate age at marriage or in life expectancy stem from composition effects or is 'city life' intrinsically different? And if so, what exactly sets cities apart from rural areas? Obviously, cities and the countryside do not exist in isolation. They share a common culture, state regulations, and a web of economic interactions. Moreover, people move from villages to cities and back. In particular sociologists have in the past strongly stressed the difference between city and countryside in many respects, suggesting that nineteenth-century industrialization and urbanization must have had enormous effects on family life, household composition, social chances and so on (see for instance [Puschmann & Solli, 2014](#)). This makes it interesting to study life courses of (rural to urban and urban to rural) migrants, as they can reveal what is special about either rural or urban life. What is the meaning of socialization, of adjustment to new living conditions, and of different economic opportunities? Thus, our issue also deals with the demography of urban migrants.

It is not surprising that systematic comparisons between rural and urban regions, as well as studies on the demographic behavior of migrants are rare in historical demography. For decades, the emphasis of most research has been on rural areas. This was mainly due to methodological issues. Between roughly the 1950s and the 1980s, the dominant technique to study individual demographic behavior was family reconstitution ([Henry & Fleury, 1956](#); [Wrigley, Davies, Oeppen, & Schofield, 1997](#)). Family reconstitutions are typically based on parish registers and gather data on the demographic events that shape the life of a married couple. The dependence on a single, location-bound source implied that only the completed marriages of immobile populations could be studied, which can have all kind of distorting effects on the measurement of demographic variables ([Ruggles, 1992](#)). Another consequence is that, especially in an era where data management and analysis were not yet computerized, it was not possible to make family reconstitutions for cities ([Newton, 2013](#)). After all, cities consisted of multiple parishes, and this severely complicates data collection for family reconstitutions when intra-urban mobility was frequent ([Gutmann & Van de Walle, 1978](#)).

With growing possibilities of digitized data management and analysis, research switched from parish registers and family reconstitution to population registers (or similar longitudinal individual data sources) and techniques of statistical life course analysis, such as event history analysis ([Alter & Gutmann, 1999](#)). Nevertheless, the limited scale of rural localities continued to be an asset in setting up doable research schemes. Many well-known and currently used databases are based on rural communities, such as the eighteenth- and nineteenth-century Krummhörn, Germany ([Johow & Volland, 2012](#); [Volland, 2000](#)). An important example is also the international comparative Eurasia-project, that is predominantly concerned with rural areas as well: the Swedish Scania-database currently contains the complete data of five parishes in rural Scania. Other data used are from the Sart and Herve, two rural regions in the Belgian Ardennes, from the Italian village Casalguidi, and from Shimomoriya and Niita, two villages in North-eastern Japan. Finally, the rural population of the Chinese provinces of Liaoning and Shuancheng were included ([Bengtsson & Campbell, 2009](#); [Lundh & Kurosu, 2014](#); [Tsuya, Wang, & Alter, 2010](#)). A French initiative to solve this bias in favor of rural information has been the TRA-project which follows families with a surname starting with the letters TRA all over France ([Bourdieu, Kesztenbaum, & Postel-Vinay, 2014](#); [Dupâquier, 1984](#)).

Much of the individual-level studies in historical demography are concentrating on the interactions between the demographic lives of individuals and their ecological, social and economic environment. The above-mentioned Eurasia project is mainly aimed at disentangling various demographic responses to different types of environmental and economic stress over the life course and the factors influencing these responses (family structure, socio-economic status, etc.). However, the exclusive focus on rural areas leaves the demographic responses to processes of industrialization and urbanization out of sight. Yet, these were major societal transformations during the nineteenth century and – as mentioned – believed to be the big watershed in social history.

Before 1980, urban populations were mainly studied using aggregate data and studies focused on population growth and the structure of urban populations (e.g. [Van der Wee, 1963](#)). While these

studies often analyzed population in relation to economic development, the lack of individual data did not allow studying actual human behavior and responses to societal change. From the 1980s on, however, a growing interest in urban historical demography became apparent with Hareven's study (1982) on the relation between family and work in an American industrial community (see for an earlier work [Anderson, 1971](#)). A groundbreaking work in this respect was also George Alter's *Family and the female life course* (1988). By focusing on the individual lives of women in the industrial textile town of Verviers (Eastern Belgium), Alter tried to grasp the tension between female labor and family expectations.

The study of urban populations allowed researchers first to scrutinize the effects of industrialization. Twenty-five years after the study on Verviers, Angélique Janssens (2014) published her book on the relation between work and reproduction in women's lives focusing on four mutually different labor markets. Second, the effect of typical urban living conditions, such as living in densely populated areas, on demographic outcomes, received attention (e.g. [Landers, 1993](#); [Kesztenbaum & Rosenthal, 2011](#)). Furthermore, cities tend to be much more heterogeneous than rural areas when it comes to the composition of the population. Thus, in urban studies, more socio-economic and cultural determinants of demographic outcomes have been integrated in the analyses. For example, in Geneva and the Hague, demographic behavior from people of various religious groups could be studied ([Schellekens & Van Poppel, 2006](#); [Schumacher, Ryckowska, & Perroux, 2007](#)). Another example is Leuven, where differentials in the fertility behavior of bourgeois and working-class couples as well as from Dutch or French speaking individuals could be discerned ([Van Bavel, 2004](#)).

2 TOWARDS COMPARISON AND DIVERSITY

The separate study of urban and rural environments has created a rather dichotomous outlook on the demography of those areas. The studies of urban-rural differences have usually concentrated on family formation and health.

The classic formulation of the European Marriage Pattern depicts rural settings in which adolescents had to delay marriage and household formation until a farm or a workshop could be inherited, either by death or retirement of the older generation ([Fertig, 2005](#); [Hajnal, 1983](#)). In theory, a shift towards early and universal marriage occurred only when land reclamation was possible, when agriculture could be intensified, or when proto-industry created new 'niches'. However, cities complicate this pastoral image of pre-industrial Europe. Dependent on their employment opportunities, cities offered an alternative to rural youths for having to wait in a subservient position. In cities, inheritance practices probably had less impact on marriage behavior and family formation than in rural areas (for example [Head-König & Pozsgai, 2012](#)).

This does not imply that it was always easier to marry in cities. On the contrary, a number of scholars argue that urban marriages were even more restricted than rural ones. Under the guild system, marriages of artisans were limited by formal conditions and their example may have spread to other groups as well. The abolishment of the guilds around 1800 did not increase the number of 'niches', but still these towns kept attracting 'superfluous' individuals from rural areas. The process of marriage in the cities was difficult, in particular for migrants. Finding a partner, amassing the necessary resources, renting a house and facing the higher costs of living all created delays or even insurmountable obstructions. Also, several European countries had laws against marriages of indigent immigrants. Census data reveal that many European cities had higher (singulate mean) ages at marriage and proportions permanently celibate than smaller settlements ([Knodel & Maynes, 1976](#)). All in all, Lynch (1991, p. 82) finds enough evidence to characterize urban nuptiality as 'an exaggerated version of the European Marriage Pattern'.

This last statement, however, seems a bit exaggerated itself. There are a number of reasons why we can expect less restricted family formation in cities. First, the brakes on marriage were often released in cities that offered employment to laborers, who reached the peak of their earning capacities at an early stage. Thus, mining towns, industrial centers and harbors tended to have low ages at first marriage. Second, regimes of high mortality prevalent in many pre-modern cities (see below) must have stimulated early household formation among the younger generation. Third, large (industrial) cities

often lacked the systems of community control that could prevent youngsters from reckless courtships and improvident marriages (Shorter, 1977). Fourth, urban populations were often more secularized than rural populations. Diminished religiosity could go hand in hand with relaxing marriage patterns, increasing illegitimate fertility and the spread of contraceptive use within marriage (see e.g. Brown, 2011; Lesthaeghe & Neels, 2002). Finally, urban populations were also more heterogeneous. Social interaction between various groups may have contributed to the diffusion of innovative demographic ideas and behavior (Matthys, 2013; Van Bavel, 2004).

Cities, especially before and during early industrialization, have a bad reputation in terms of health. Infectious diseases could spread more rapidly in places with a high population density, in combination with bad housing and lack of sanitation. Also, mortality in cities may have been higher due to composition effects (a larger share of lower working class) and the presence of hospitals and orphanages (Devos & Van Rossem, 2015). Urban women's work, especially in factories, has also been associated with elevated mortality, as obstacles to breastfeeding possibly increased infant mortality rates (Devos & Van Rossem, 2015, p. 94; Walhout, 2010). However, urban inhabitants may have increasingly profited from an 'urban premium' in the course of the nineteenth century: the emergence of infrastructural elements that were potentially beneficial for their health, such as earlier or better access to sanitation, water works, medical care institutions, etc. In addition, urban residents enjoyed an urban premium because they had access to a wider range of better paid jobs and were in general materially better off than rural residents, as Reis (2009) showed for Lisbon. Devos and Van Rossem (2015) have found that, at least for Belgium, the extent and nature of urban (sur)mortality differed from place to place, and they call for more attention to specific conditions in cities. We agree with this, though we want to suggest to include even more local variation. Rather than drawing a strict line between cities and the countryside, we propose to use a more diverse scheme including small rural villages, small towns or provincial towns and larger urban centers.

3 DEMOGRAPHIC RESPONSES OF URBAN MIGRANTS

How does moving to a city affect family formation, social mobility and health of the migrants? How can we effectively control for selection effects? Studies of the demographic lives of migrants are rare as a result of the same methodological factors that have long hampered urban historical demography. In family reconstitution, migration was an insurmountable obstacle and even the emergence of digital databases could not overcome this issue completely. Databases like the Scania database are based on a limited number of localities and therefore cover only a small portion of the trajectories of mobile populations. An additional problem when studying migrants is that it is hard to define a 'migrant'. Who is considered as a migrant depends heavily on the available sources and how the study is set up: can everyone who is born elsewhere be seen as a migrant? What is the best approach to urban migration? In Lucassen & Lucassen's (2017) proposal for the definition of 'cross-cultural migration', moves from countryside to cities are included, but left out for the twentieth century. In their view, the differences between cities and countryside had become too small in the twentieth century to speak of crossing cultural borders, at least in Western Europe.

Nevertheless, the study of urban migration is extremely relevant. Migrants did not only make up large numbers of urban populations, they could also have been important actors in the diffusion of demographic ideas and behavior. Migration has been associated and intertwined with the effects of selection, isolation and assimilation processes. First, selection could be based on occupation or literacy, but also on unobservable characteristics, such as health and openness to innovation and change. Second, migrants are sometimes considered to have a less established network than those who do not migrate. Finally, migrants sometimes moved between drastically different settings, bringing their norms, ideas and habits with them while also encountering new ones (Puschmann, Van den Driessche, Grönberg, Van de Putte, & Matthijs, 2015). They could assimilate to the dominant culture of the destination place or be permanently influenced by the culture of their place of origin.

A few studies have analysed the fertility of migrants in historical Europe and they have come to mixed conclusions. In nineteenth-century Antwerp, Verviers and Bremen fertility levels of (rural) immigrants were lower than those of the urban-born population, particularly as a result of prolonging birth intervals (Desama, 1985; Lee, 2000; Moreels, Vandezande, & Matthijs, 2010). However, in Geneva, migrant

women had higher fertility rates than natives. While in the industrial basin of Charleroi migrant fertility was similar to that of the native-born population (Eggerickx, 2001; Perrenoud, 1995). The studies cited so far focus on urban settings. Analyses of migrant fertility in rural surroundings are even rarer. Two studies on rural Eastern Belgium – in Sart and Herve – nevertheless suggest that the fertility of migrant women was lower than that of the locally born (Alter, Oris, & Neven 2007; Neven, 2003, pp. 403-404).

The influx of single migrants frequently resulted in higher average ages at marriage in cities (e.g. Moreels & Matthijs, 2011; Puschmann, Grönberg, Schumacher, & Matthijs, 2014). Among migrants, household formation probably took more time. They needed time to get adjusted, their wages were relatively low, and they lacked contacts with potential partners. Migrants from peripheral provinces were even more or less stigmatized. As a migrant from Zealand to Rotterdam reminisced: 'Getting adapted was awkward. Dress, language and strangeness formed a great contrast with city folk. We were often scorned as "farmers"' (Bouman & Bouman, 1952, p. 37). Migrants often preferred to live in a neighborhood with fellow countrymen. When regional migrant streams had skewed sex ratios, meeting future spouses would be even more difficult.

Urban migration has also been studied in relation to social mobility (e.g. Kok & Delger, 1997). Perhaps the migration literature has paid too much attention to a so-called 'floating proletariat' of migrants who left quickly and who supposedly only contributed to urban misery (Thernstrom, 1973). For instance, Germans who moved to and stayed in the city of Rotterdam actually fared very well. They were positively selected to begin with, but they managed to reach higher positions than the natives born in Rotterdam (Delger, 2006; Lucassen, 2004). But even those who left the city again, may have taken advantage of their stay. Domestic service has been regarded as a possible 'bridging occupation', allowing girls from rural lower-class families to achieve upward mobility because of their social and cultural capital gained in cities. Bras (1998) showed that rural girls who worked in cities were able to marry a higher status husband (although city girls fared even better). Girls moving to a city were already a selected group, being able to draw on parental resources. The girls came from families of teachers, supervisors, lower civil servants, and skilled labourers. These families could afford losing direct income by having a family member working in the urban sector and could possibly spread their risks in times of economic hardship. They could also have seen a position in urban domestic service as an opportunity for education and upward mobility for their daughters (Matthys, 2012; Matthys, 2013; Vanhaute & Matthys, 2007). Recently, the life course of singles in cities have received attention. Generally, cities had higher levels of permanent celibacy than the countryside, either because of skewed sex ratios or obstacles for migrants on the marriage market. But cities also offered employment, housing and sociability to those who preferred, or happened, to remain unmarried (Devos, Schmidt, & De Groot, 2016; Kok & Mandemakers, 2016).

The relation between migration and mortality is affected by various dynamics. Firstly, selection of migrants according to their health status has been used as an explanation for the mortality advantages of migrants over locally born residents (Alter & Oris, 2005; Kennedy, Kidd, McDonald, & Biddle, 2015; Kesztenbaum & Rosenthal, 2011; Puschmann, Donrovich, Grönberg, Dekeyser, & Matthijs, 2016). Migrants who leave their hometown to work elsewhere must be in a good physical condition to undertake such a journey and find a job, consequently rural-urban migrants often even have a lower mortality risk than native urban dwellers. A second – and at first sight opposite – effect is that migrants from rural areas were frequently less adapted to the disease prone environment of densely populated cities, making them more susceptible for epidemics. This was especially of importance before the second half of the nineteenth century when epidemics still played a very large role in urban mortality. In other words, rural-urban migrants suffered more from the urban graveyard effect than those born in the city (see Alter & Oris, 2005; Costa, 2003; Lee, 1997; Puschmann, Donrovich, Dekeyser, & Matthijs, 2013). Finally, it has been noticed that migrants whose health deteriorated over time, sometimes returned to their place of origin (Puschmann et al., 2016). This is called the salmon-bias effect because these people do not enter the urban statistics regarding mortality and ill health, though they may well have acquired their health problems in an urban environment (cf. Puschmann, Donrovich, & Matthijs, 2017).

As is the case with urban-rural comparisons, we must be on the alert for simplifications regarding migrants. Expanding the study of the life courses of migrants beyond the urban environments is a first step but we should also acknowledge that for many movers, migration was not a sudden and definitive break with the family and place of origin. Instead, migrants were often embedded in trans-regional

social networks and sustained links between rural and urban populations (Sewell, 1985, see also the study of sibling effects by Bras & Neven, 2007).

4 THE ARTICLES IN THIS ISSUE

Several papers in this special issue combine both an urban-rural comparison with a more in-depth focus on migrants.

Gruber and Scholz (2018) contribute to this issue with a paper on the fertility of the nineteenth-century city Rostock (Germany) and its rural surroundings. They also investigate how the fertility of immigrants in Rostock differed from that of the native population. Using census data, the authors show a more rapid fertility decline in the city than on the countryside, but – rather surprisingly – did not find significant differences between the fertility of migrants and natives within Rostock.

Störmer, Gellatly, Boele and De Moor (2018) analyze how marriage ages of men and women developed between 1650 and 1900 in the Netherlands. They compare these developments in rural and urban environments and distinguish between migrants and natives. Within the migrant group, further distinction is made as to whether the distance/travelling time between the place of marriage and birth was within or beyond daily reach. They show that mobile individuals tended to marry late, both in comparison to the stayers in their hometown as to the residents in their destination.

Paping and Pawlowski (2018) compare the socioeconomic origin of rural stayers and rural-urban migrants in the Dutch province of Groningen (nineteenth and early twentieth century), clearly demonstrating the existence of selection effects in migration. Not children of the lowest classes, but those of (lower) middle and higher classes were much more prone to move to the city, shedding doubt on the general idea of the growing nineteenth-century cities as being flooded by rural proletarians. Moreover, when studying intergenerational social mobility performance, the authors also find that rural movers to the city from most social backgrounds were in general socially more successful than rural stayers. This was especially true for men, and also for those returning to the countryside.

To study urban-rural health differentials, Kok, Beekink and Bijsterbosch (2018) use data on stature of young adult men. By comparing a village and a provincial (but early industrial) town in the western Netherlands (in the first half of the nineteenth century) and by demonstrating that specific working conditions had an effect on adolescent height, the paper shows that differentiation between various types of communities is more relevant than a limitative rural-urban dichotomy.

In their paper on Scotland, Reid and Garrett (2018) compare mortality and health figures for an urban and a rural area in Scotland (1861-1901). In particular, they focus on the different outcomes on tuberculosis in these two distinct environments. Even though they only possess static data, Reid and Garrett try to estimate the effect of migration by comparing various subsequent data sources. Their outcomes suggest that selective migration of the fittest, coupled with return migration of the chronically ill, inflated mortality from causes such as tuberculosis in rural areas. Thus, when migration rates and directions are very gender-specific, this can produce strong sex differentials in mortality.

The articles have shown that place of residence mattered a great deal for all kinds of demographic outcomes, even when controlling for social status. They have also shown that we need to move beyond the simple rural-urban dichotomy. What is needed is a more thorough understanding of local demographic characteristics (e.g. sex ratios), of working and living conditions, of sanitary improvements and their timing and so on. Moreover, by studying life courses in terms of marriage chances, of social mobility and health of rural to urban migrants – and those who returned home – we have just begun to explore how place affected demographic opportunities and constraints.

REFERENCES

- Alter, G. (1988). *Family and the female life course: the women of Verviers, Belgium, 1849-1880*. Madison: University of Wisconsin Press.
- Alter, G., & Gutmann, M. (1999). Casting spells. Database concepts for event history analysis. *Historical Methods*, 32(4), 165-176. doi: [10.1080/01615449909598938](https://doi.org/10.1080/01615449909598938)
- Alter, G., & Oris, M. (2005). Childhood conditions, migration, and mortality: migrants and natives in 19th-century cities. *Social Biology*, 52(3-4), 178-191. doi: [10.1080/19485565.2005.9989108](https://doi.org/10.1080/19485565.2005.9989108)
- Alter, G., Oris, M., & Neven, M. (2007). When protoindustry collapsed fertility and the demographic regime in rural Eastern Belgium during the industrial revolution. *Historical Social Research*, 32(2), 137-159. doi: [10.12759/hsr.32.2007.2.137-159](https://doi.org/10.12759/hsr.32.2007.2.137-159)
- Anderson, M. (1971). *Family structure in 19th century Lancashire*. Cambridge: Cambridge University Press.
- Bengtsson, T., & Campbell, C. (2009). *Life under pressure. Mortality and living standards in Europe and Asia 1700-1900*. Massachusetts: MIT Press.
- Bouman, P.J., & Bouman, W.H. (1952). *De groei van de grote werkstad*. Assen: van Gorcum.
- Bourdieu, J., Kesztenbaum, L., & Postel-Vinay, G. (2014). The TRA project, a historical matrix. *Population*, 69(2), 191-220. doi: [10.3917/popu.1402.0217](https://doi.org/10.3917/popu.1402.0217)
- Bras, H. (1998). Domestic service, migration and the social status of woman at marriage. The case of a Dutch sea province, Zeeland 1820-1935. *Historical Social Research*, 23(3), 3-19. doi: [10.12759/hsr.23.1998.3.3-19](https://doi.org/10.12759/hsr.23.1998.3.3-19)
- Bras, H., & Neven, M. (2007). The effects of siblings on the migration of women in two rural areas of Belgium and the Netherlands, 1829-1940. *Population Studies*, 61(1), 53-71. doi: [10.1080/00324720601048319](https://doi.org/10.1080/00324720601048319)
- Brown, C. (2011). The people of no religion: the demographics of secularisation in the English speaking world since c.1900. *Archiv für Sozialgeschichte*, 51, 37-61. Retrieved from <http://eprints.gla.ac.uk/78192/1/78192.pdf>
- Costa, D. (2003). *Health and labor force participation over the life cycle. Evidence from the past*. Chicago: University of Chicago Press.
- Delger, H. (2006). Arbeidsmarkt en beroepsmobiliteit. Een onderzoek naar de gelegenheidsstructuur voor Duitse migranten in Rotterdam, 1870-1930. In L. Lucassen & K. Mandemakers (Eds.), *Naar Rotterdam, Naar Rotterdam. Immigratie en levenslopen in Rotterdam vanaf het einde van de negentiende eeuw* (pp. 75-97). Amsterdam: Aksant.
- Desama, C. (1985). *Population et révolution industrielle. Evolution des structures démographiques à Verviers dans la première moitié du 19e siècle*. Paris: Belles Lettres.
- Devos, I., Schmidt, A., & De Groot, J. (2016). Introduction. Unmarried and unknown. Urban men and women in the low countries since the early modern period. *Journal of Urban History*, 42(1), 3-20. doi: [10.1177/0096144215610770](https://doi.org/10.1177/0096144215610770)
- Devos, I., & Van Rossem, T. (2015). Urban health penalties: estimates of life expectancies in Belgian cities, 1846-1910. *Journal of Belgian History*, 45(4), 74-109.
- Dupâquier, J. (1984). L'enquête des 3 000 familles. *Population*, 39(2), 380-383.
- Eggerickx, T. (2001). The fertility decline in the industrial area of Charleroi during the second half of the nineteenth century. Did sedentaries and migrants have a different behaviour? *Belgisch Tijdschrift voor Nieuwste Geschiedenis – Revue belge d'histoire contemporaine*, 31(3-4), 403-429. Retrieved from https://www.journalbelgianhistory.be/fr/system/files/article_pdf/BTNG-RBHC%2C%2031%2C%202001%2C%203-4%2C%20pp%20403-429.pdf
- Fertig, G. (2005). The Hajnal hypothesis before Hajnal. In Th. Engelen & A.P. Wolf (Eds.), *Marriage and the family in Eurasia. Perspectives on the Hajnal hypothesis* (pp. 37-48). Amsterdam: Aksant.
- Gruber, S., & Scholz, R. (2018). Fertility in Rostock and Rural Mecklenburg-Schwerin in the 19th Century. Fertility differences by urban/rural residence, occupational groups, and migration. *Historical Life Course Studies*, 6, 11-39. Retrieved from <http://hdl.handle.net/10622/23526343-2018-0002?locatt=view:master>
- Gutmann, M.P., & Van de Walle, E. (1978). New sources for social and demographic history: the Belgian population register. *Social Science History*, 2(2), 121-143. doi: [10.1017/S0145553200022367](https://doi.org/10.1017/S0145553200022367)
- Hajnal, J. (1983). Two kinds of pre-industrial household formation system. In R. Wall, J. Robin & P. Laslett (Eds.), *Family forms in historic Europe* (65-104). Cambridge: Cambridge University Press.
- Hareven, T. (1982). *Family time & industrial time. The relationship between the family and work in a New England industrial community*. Cambridge: Cambridge University Press.

- Head-König, A.-L., & Pozsgai, P. (Eds.). (2012). *Inheritance practices, marriage strategies and household formation in European rural societies*. Turnhout: Brepols.
- Henry, L., & Fleury, M. (1956). *Des registres paroissiaux à l'histoire de la population. Manuel de dépouillement et d'exploitation de l'état civil ancien*. Paris: INED.
- Janssens, A. (2014). *Labouring Lives. Women, work and the demographic transition in the Netherlands, 1880-1960*. Bern: Peter Lang.
- Johow, J., & Volland, E. (2012). Conditional grandmother effects on age at marriage, age at first birth, and completed fertility of daughters and daughters-in-law in historical Krummhörn. *Human Nature*, 23(3) 341-359. doi: [10.1007/s12110-012-9147-7](https://doi.org/10.1007/s12110-012-9147-7)
- Kennedy, S., Kidd, M. P., McDonald J. T., & Biddle, N. (2015). The healthy immigrant effect: patterns and evidence from four countries. *Migration & Integration*, 16(2), 317-332. doi: [10.1007/s12134-014-0340-x](https://doi.org/10.1007/s12134-014-0340-x)
- Kesztenbaum, L., & Rosenthal, J.-L. (2011). The health cost of living in a city. The case of France at the end of the 19th century. *Explorations in Economic History*, 48(2), 207-225. doi: [10.1016/j.eeh.2010.12.002](https://doi.org/10.1016/j.eeh.2010.12.002)
- Knodel, J., & Maynes, M.-J. (1976). Urban and rural marriage patterns in Imperial Germany. *Journal of Family History*, 1(2), 129-161. doi: [10.1177/036319907600100201](https://doi.org/10.1177/036319907600100201)
- Kok, J., & Delger, H. (1997). Success or selection? The effect of migration on occupational mobility in a Dutch province, 1840-1950. *Histoire & Mesure*, 13(3-4), 289-322. Retrieved from https://www.persee.fr/doc/hism_0982-1783_1998_num_13_3_1492
- Kok, J., Beekink, E., & Bijsterbosch, D. (2018). Environmental influences on young adult male height, a comparison of town and countryside in the Netherlands, 1815-1900. *Historical Life Course Studies*, 6, 95-110. Retrieved from <http://hdl.handle.net/10622/23526343-2017-0010?locatt=view:master>
- Kok, J., & Mandemakers, K. (2016). Life and death of singles in Dutch cities. *Journal of Urban History*, 42(1), 101-120. doi: [10.1177/0096144215611098](https://doi.org/10.1177/0096144215611098)
- Landers, J. (1993). *Death and the metropolis: studies in the demographic history of London 1670-1830*. Cambridge: Cambridge University Press.
- Lee, C. (1997). Socio-economic background, disease, and mortality among union army recruits: implications for economic and demographic history. *Explorations in Economic History*, 34(1), 27-55. doi: [10.1006/exeh.1996.0661](https://doi.org/10.1006/exeh.1996.0661)
- Lee, R. (2000). Labor market constraints and the integration of urban in-migrants: the case of Bremen, 1815-1914. In R. Leboutte (Ed.), *Migrations and Migrants in Historical Perspective. Permanencies and Innovations* (pp. 165-205). Bern: Peter Lang.
- Lesthaeghe, R., & Neels, K. (2002). From the first to the second demographic transition: an interpretation of the spatial continuity of demographic innovation in France, Belgium and Switzerland. *European Journal of Population*, 18(4), 325-360. doi: [10.1023/A:1021125800070](https://doi.org/10.1023/A:1021125800070)
- Lucassen, J., & Lucassen, L. (2017). Theorizing cross-cultural migrations: the case of Eurasia since 1500. *Social Science History*, 41(3), 445-475. doi: [10.1017/ssh.2017.19](https://doi.org/10.1017/ssh.2017.19)
- Lucassen, L. (2004). De selectiviteit van blijvers: een reconstructie van de sociale positie van Duitse migranten in Rotterdam (1870-1885). *Tijdschrift voor Sociale en Economische Geschiedenis*, 1(2), 92-115. doi: [10.18352/tseg.826](https://doi.org/10.18352/tseg.826)
- Lundh, C., & Kurosu, S. (2014). *Similarity in difference: marriage in Europe and Asia 1700-1900*. Massachusetts: MIT Press.
- Lynch, K.A. (1991). The European marriage pattern in the cities: variations on a theme by Hajnal. *Journal of Family History*, 16(1), 79-96. doi: [10.1177/036319909101600106](https://doi.org/10.1177/036319909101600106)
- Matthys, C. (2012). *Sex and the city: female domestic servants and the diffusion of fertility control in Flanders, 1830-1930* (Ph.D thesis). Ghent: University of Ghent. Retrieved from <https://biblio.ugent.be/publication/2028431>
- Matthys, C. (2013). Domestic servants and diffusion of fertility control in Flanders, 1830-1930. *The History of the Family*, 18(4), 456-480. doi: [10.1080/1081602X.2013.811436](https://doi.org/10.1080/1081602X.2013.811436)
- Moreels, S., & Matthijs, K. (2011). Marrying in the city in times of rapid urbanization. *Journal of Family History*, 36(1), 72-92. doi: [10.1177/0363199010390615](https://doi.org/10.1177/0363199010390615)
- Moreels, S., Vandezande, M., & Matthijs, K. (2010). Fertility in the port city of Antwerp (1846-1920). A detailed analysis of immigrants spacing behaviour in an urbanizing context. *Working paper of the scientific research community Historical Demography*. Retrieved from <http://soc.kuleuven.be/ceso/historischedemografie/resources/pdf/WOG%20working%20paper14.pdf>
- Neven, M. (2003). *Individus et familles: les dynamiques d'une société rurale. Le Pays de Herve dans la seconde moitié du XIXe siècle*. Liège: Université de Liège.

- Newton, G. (2013). Family reconstitution in an urban context: some observations and methods. *Cambridge Working Papers in Economic and Social History*, 12. Retrieved from <http://www.econsoc.hist.cam.ac.uk/docs/CWPESH%20number%2012%20Jan%202013.pdf>
- Paping, R., & Pawlowski, J. (2018). Success or failure in the city? Social mobility and rural-urban migration in the nineteenth and early twentieth century. *Historical Life Course Studies*, 6, 69-94. Retrieved from <http://hdl.handle.net/10622/23526343-2018-0004?locatt=view:master>
- Perrenoud, A. (1995). Aspects of fertility decline in an urban setting: Rouen and Geneva. In A. van der Woude & A. Hayami (Eds.), *Urbanization in History. A process of dynamic interactions* (pp. 243-263). Oxford: Oxford University Press.
- Puschmann, P., Donrovich, R., Dekeyser, G., & Matthijs, K. (2013). *Migration and urban graveyards. Comparing mortality risks between urban in-migrants and natives in a western European port city: the case of Antwerp, 1846-1920*. Paper presented at the XXVII IUSSP International Population Conference, Busan, Republic of Korea, 26-31 August 2013. Retrieved from https://iussp.org/sites/default/files/event_call_for_papers/21_08_2013%20IUSSP%20Paper%20Migration%20and%20Urban%20Graveyards.pdf
- Puschmann, P., Donrovich, R., Grönberg, P., Dekeyser, G., & Matthijs, K. (2016). Disfavored in life, favored in death? Later-life mortality differences (ages 30+) between migrants and natives in Antwerp, Rotterdam and Stockholm, 1850-1930. *Historical Social Research*, 41(4), 257-290. doi: [10.12759/hsr.41.2016.4.257-290](https://doi.org/10.12759/hsr.41.2016.4.257-290)
- Puschmann, P., Donrovich, R., & Matthijs, K. (2017). Salmon bias or red herring? Comparing adult mortality risks (ages 30-90) between natives and internal migrants: stayers, returnees and movers in Rotterdam, the Netherlands, 1850-1940. *Human Nature*, 28(4), 481-499. doi: [10.1007/s12110-017-9303-1](https://doi.org/10.1007/s12110-017-9303-1)
- Puschmann, P., Grönberg, P.-O., Schumacher, R., & Matthijs, K. (2014). Access to marriage and reproduction among migrants in Antwerp, Rotterdam and Stockholm. A longitudinal approach to processes of social inclusion and exclusion. *The History of the Family*, 19(1), 29-52. doi: <https://doi.org/10.1080/1081602X.2013.796889>
- Puschmann, P., & Solli, A. (2014). Household and family during urbanization and industrialization: efforts to shed new light on an old debate. *The History of the Family*, 19(1), 1-12. doi: [10.1080/1081602X.2013.871570](https://doi.org/10.1080/1081602X.2013.871570)
- Puschmann, P., Van den Driessche, N., Grönberg, P., Van de Putte, B., & Matthijs, K. (2015). From outsiders to insiders? Partner choice and marriage among internal migrants in Antwerp, Rotterdam & Stockholm, 1850-1930. *Historical Social Research*, 40(2), 319-358. doi: [10.12759/hsr.40.2015.2.319-358](https://doi.org/10.12759/hsr.40.2015.2.319-358)
- Reid, A., & Garrett, E. (2018). Geography and gender: young adult mortality in town and country. Scotland 1861-1901. *Historical Life Course Studies*, 6, 111-132. Retrieved from <http://hdl.handle.net/10622/23526343-2018-0007?locatt=view:master?>
- Reis, J. (2009). "Urban premium" or "urban penalty"? The case of Lisbon, 1840-1912. *Historia Agraria* 47, 69-94. Retrieved from <https://ideas.repec.org/a/seh/journal/y2009i47maprilp69-94.html>
- Ruggles, S. (1992). Migration, marriage, and mortality: correcting sources of bias in English family reconstitutions. *Population Studies*, 46(3), 507-522. doi: [10.1080/0032472031000146486](https://doi.org/10.1080/0032472031000146486)
- Schellekens, J., & Van Poppel, F. (2006). Religious differentials in marital fertility in the Hague (Netherlands) 1860-1909. *Population Studies*, 60(1), 23-28. doi: [10.1080/00324720500430758](https://doi.org/10.1080/00324720500430758)
- Schumacher, R., Ryckowska, G., & Perroux, O. (2007). Unwed mothers in the city. Illegitimate fertility in 19th-century Geneva. *The History of the Family*, 12(3), 189-202. doi: [10.1016/j.hisfam.2007.10.002](https://doi.org/10.1016/j.hisfam.2007.10.002)
- Sewell, W.H. (1985). *Structure and mobility. The men and women of Marseille, 1820-1870*. Cambridge: Cambridge University Press.
- Shorter, E. (1977). *The making of the modern family*. New York: Basic Books.
- Störmer, C., Gellatly, C., Boele, A., & De Moor, T. (2018). Long-term trends in marriage timing and the impact of migration, the Netherlands (1650-1899). *Historical Life Course Studies*, 6, 40-68. Retrieved from <http://hdl.handle.net/10622/23526343-2017-0012?locatt=view:master>
- Thernstrom, S. (1973). *The Other Bostonians. Poverty and Progress in the American Metropolis, 1880-1970*. Harvard: Harvard University Press.
- Tsuya, N., Wang, F., & Alter, G. (2010). *Prudence and Pressure. Reproduction and human agency in Europe and Asia 1700-1900*. Massachusetts: MIT Press.

- Van Bavel, J. (2004). Diffusion effects in the European fertility transition: historical evidence from within a Belgian town (1846-1910). *European Journal of Population*, 20(1), 63–85. doi: [10.1023/B:EUJP.0000014572.66520.0d](https://doi.org/10.1023/B:EUJP.0000014572.66520.0d)
- Van der Wee, H. (1963). *Growth of the Antwerp Market and the European Economy*. The Hague: Nijhoff.
- Vanhaute, E., & Matthys, C. (2007). A 'Silent Class' and a 'Quiet Revolution.' Female domestics and fertility decline in Flanders. In A. Janssens (Ed.), *Gendering the fertility decline in the Western World* (pp. 335-364). Bern: Peter Lang.
- Voland, E. (2000). Contributions of family reconstitution studies to evolutionary reproductive ecology. *Evolutionary Anthropology Issues News and Reviews*, 9(3), 134-146. doi: [10.1002/1520-6505\(2000\)9:3<134::AID-EVAN3>3.0.CO;2-M](https://doi.org/10.1002/1520-6505(2000)9:3<134::AID-EVAN3>3.0.CO;2-M)
- Walhout, E. (2010). Is breast best? Evaluating breastfeeding patterns and causes of infant death in a Dutch province in the period 1875–1900. *The History of the Family*, 15(1), 76-90. doi: [10.1016/j.hisfam.2009.12.001](https://doi.org/10.1016/j.hisfam.2009.12.001)
- Wrigley, E.A, Davies, R.S., Oeppen, J.E., & Schofield, R.S. (1997). *English population history from family reconstitution 1580-1837*. Cambridge: Cambridge University Press.